domestication and distribution of cultivated plants in America, and in view of this must be considered also as a point of convergence in attempting to trace back to their origins other features of primitive civilization. The large number of domesticated plants and the high development of agriculture in Peru testify even more forcibly than the succession of different styles of Cyclopean architecture to the presence of large agricultural populations in the valleys of the eastern Andes through long periods of time. The ancient reclamation works of Peru challenge comparison with anything that was accomplished in Egypt or Assyria. How far the influence of the ancient Peruvian civilization may have extended in America or elsewhere is a question to which attention may well be given. Pressure of population is a compelling force in the domestication of plants and the development of intensive agriculture, as well as a cause of migration to unoccupied regions. The essential unity of physical types and of agricultural and other arts among the more advanced peoples of ancient America is to be taken into account, as well as the indications of early trans-Pacific communication of agricultural arts and cultivated plants.

It is important to consider all of the archeological and ethnological agreements or coincidences, since these may make it possible to determine the stage of development of civilization in which the prehistoric communication occurred. Whether any particular agreement of words, traditions, or "culture elements" is of real significance is not likely to be determined until such data are brought into relation with facts of other kinds. From the House of Tcuhu in Arizona to the Labyrinth of Minos in Crete, by the way of Peru and Polynesia, is a long journey, but it covers the most practicable routes for the gradual extension of primitive agricultural peoples. That the labyrinth design originated independently in the two hemispheres is as hard to believe as that different people should have identical thumb-prints. If post-Columbian transfer from the Mediterranean region can not be shown, the trans-Pacific route from America to the old world should be considered.

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BENJAMIN FRANKLIN AND THE STRUGGLE FOR EXISTENCE

THE extent of Benjamin Franklin's mailing address mentioned in the contributions of Dr. Hussakoff and Professor Woodruff in recent issues of SCIENCE is equalled only by the breadth of Franklin's scientific and other interests.

Just as Darwin and Wallace arrived at the theory of natural selection by reading Malthus's essay on the "Principle of Population" so Malthus was prompted to write his essay by reading a very brief contribution of Franklin published in 1751 "Concerning the Increase of Mankind."

Franklin's clear observations on the peopling of the New World led him very surely to the notion of a struggle for existence and the pressure of population on the environment. On these two points Franklin writes as follows:

> There is, in short, no bound to the prolific nature of plants and animals but what is made by their crowding and interfering with each other's means of subsistence. Was the face of the earth vacant of other plants, it might be gradually sowed and overspread with one kind only. as, for instance, with fennel, and were it empty of other inhabitants, it might in a few ages be replenished from one nation only, as, for instance, with Englishmen. Thus there are supposed to be now upwards of 1,000,000 of English souls in North America (though it is thought that scare 80,000 have been brought over sea) and yet, perhaps, there is not one the fewer in Britain.

Regarding the pressure of population, Franklin says in this same essay that America is

> chiefly occupied by Indians who subsist mostly by hunting. But as the hunter, of all men requires the greatest quantity of land from whence to draw his subsistence, the Europeans found America as fully settled as it well could be by hunters.

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